

Analytical & Consulting Services

4309 Armour Avenue Bakersfield, California 93308 (661) 395-0539 FAX (661) 395-3069

July 1, 2015

Art McAdams Art McAdams P.O. Box 82046 Bakersfield, CA 93380-2046

TEL: 661-978-1455

FAX: -

Project ID: RE: 1506085

Dear Art McAdams:

Zalco Laboratories, Inc. received 1 samples on 6/4/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager

CC:Richard Thesken



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Art McAdams

Project: RWQCB Oilfield Ponds - 2Q2015

Work Order No.: 1506085

P.O. Box 82046

Project #:

Reported: 07/01/2015

Bakersfield, CA 93380-2046

Attention: Art McAdams

Received: 06/04/2015 16:50

Lab Sample ID: 1506085-01

Collected By: Richaed Thesken

Client Sample ID: Section 35

Date Collected: 6/4/2015 3:45:00PM

							Date	Date	
Analyte	Results	PQL		Units	Flag	Method	Prepared	Analyzed	Init.
Alkalinity									
Total Alkalinity	270	10		mg/L		SM 2320B	6/5/15	6/5/15	SAM
Bicarbonate (HCO3)	250	10		mg/L		SM 2320B	6/5/15	6/5/15	SAM
Carbonate (CO3)	24	10		mg/L		SM 2320B	6/5/15	6/5/15	SAM
Hydroxide (OH)	<10	10		mg/L		SM 2320B	6/5/15	6/5/15	SAM
CAM, Toxicity (17 Meta	ls)		TTLC Limits						
Antimony	<0.20	0.20	500	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Arsenic	<0.020	0.020	500	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Barium	0.13	0.10	10000	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Beryllium	<0.010	0.010	75	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Cadmium	<0.010	0.010	100	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Chromium	<0.050	0.050	2500	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Cobalt	<0.10	0.10	8000	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Copper	<0.050	0.050	2500	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Lead	<0.050	0.050	1000	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Mercury	<0.0020	0.0020	20	mg/L		SW846 7470A	6/8/15	6/8/15	SS
Molybdenum	<0.10	0.10	3500	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Nickel	0.065	0.050	2000	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Selenium	<0.05	0.05	100	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Silver	<0.020	0.020	500	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Thallium	<0.50	0.50	700	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Vanadium	<0.10	0.10	2400	mg/L		SW846 6010B	6/5/15	6/8/15	SS
Zinc	<0.050	0.050	5000	mg/L		SW846 6010B	6/5/15	6/8/15	SS
General Chemistry			MCL Limits						
Fluoride	1.3	0.10	2	mg/L		EPA 300.0	6/8/15	6/8/15	MSS
Nitrate as NO3	<50.0	50.0	45	mg/L		EPA 300.0	6/8/15	6/8/15	MSS
Electrical Conductivity	1.8	0.010		mmhos/cm		SM 2510B	6/8/15	6/8/15	SAM
Bromide	1.0	0.10		mg/L		EPA 300.0	6/5/15	6/5/15	MSS
Chloride	380	50		mg/L		EPA 300.0	6/5/15	6/5/15	MSS
pН	8.67			pH Units		EPA 150.1	6/5/15	6/5/15	SAM
Sulfate as SO4	17	0.50		mg/L		EPA 300.0	6/8/15	6/8/15	MSS
Total Dissolved Solids	1000	10		mg/L		SM 2540C	6/8/15	6/10/15	MSS

Hardness

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative *:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-6°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.



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Project: RWQCB Oilfield Ponds - 2Q2015

Work Order No.: 1506085

P.O. Box 82046

Pyrene

<10.0

Project #:

Reported: 07/01/2015

Bakersfield, CA 93380-2046

Attention: Art McAdams

Received: 06/04/2015 16:50

Lab Sample ID: 1506085-01

Collected By: Richaed Thesken

Client Sample ID: Section 35

Date Collected: 6/4/2015 3:45:00PM

					Date	Date	
Analyte	Results	PQL	Units	Flag Method	Prepared	Analyzed	Init.
Hardness							
Hardness (as CaCO3)	70	2.0	mg/L	SM 2340B	6/8/15	6/8/15	SS
Metals - As Received							
Lithium	0.16	0.10	mg/L	EPA 200.7	6/8/15	6/8/15	SS
Magnesium	4.3	0.050	mg/L	EPA 200.7	6/8/15	6/8/15	ss
Potassium	9.0	0.50	mg/L	EPA 200.7	6/8/15	6/8/15	SS
Sodium	400	7.0	mg/L	EPA 200.7	6/8/15	6/8/15	SS
Calcium	21	0.050	mg/L	EPA 200.7	6/8/15	6/10/15	SS
Iron	<0.10	0.10	mg/L	EPA 200.7	6/8/15	6/8/15	SS
Boron	1.1	0.10	mg/L	EPA 200.7	6/8/15	6/10/15	SS
Barium	0.14	0.10	mg/L	EPA 200.7	6/8/15	6/10/15	SS
Copper	< 0.050	0.050	mg/L	EPA 200.7	6/8/15	6/8/15	SS
Silica (SiO2)	40	4.0	mg/L	EPA 200.7	6/8/15	6/8/15	SS
Strontium	0.71	0.10	mg/L	EPA 200.7	6/8/15	6/8/15	SS
Manganese	<0.030	0.030	mg/L	EPA 200.7	6/8/15	6/8/15	SS
Petroleum Hydrocarbon	s						
Diesel Range Hydrocarbons	1.12	0.05	mg/L	SW846 8015B	6/11/15	6/12/15	BIG
Gasoline Range Hydrocarbons	<0.050	0.050	mg/L	SW846 8015B	6/16/15	6/16/15	HLP
Motor Oil Range Hydrocarbons	3.07	0.15	mg/L	SW846 8015B	6/11/15	6/12/15	BIG
Surrogates		% Recovery Recovery Limits	Flag				······································
No.		The state of the s		Charles and the second			History and the second
a,a,a-Trifluorotoluene		85.6 69-125			6/	16/15 10:23	
Semivolatile Organic Co	mpounds						
Indeno(1,2,3-cd)pyrene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Naphthalene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Acenaphthylene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Acenaphthene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Fluorene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Phenanthrene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Anthracene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Fluoranthene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
			-				

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ug/L

SW846 8270C

6/8/15

6/15/15

JMM

10.0

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Analyte	Results	PQL	Units	Flag Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic C							
Benzo (a) anthracene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Chrysene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Benzo (b) fluoranthene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Benzo (k) fluoranthene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Benzo (a) pyrene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Dibenz (a,h) anthracene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Benzo (g,h,i) perylene	<10.0	10.0	ug/L	SW846 8270C	6/8/15	6/15/15	JMM
Surrogates		% Recovery Recovery Limits	Flag				
Nitrobenzene-d5		44.7 0-95				15/15 15:50	
2-Fluorobiphenyl		45.7 0-92				15/15 15:50	
Ferphenyl-dl4		43.3 0-100			0/	15/15 15:50	
Subcontracted Analyse	es						
Gross Alpha	<15.0	15.0	pCi/L	SM 7110C	6/15/15	6/16/15	MCS
Radium-226	<3.00	3.00	pCi/L	E903.1	6/13/15	6/23/15	MCS
Radium-228	<2.00	2.00	pCi/L	EPA Ra-05	6/20/15	6/25/15	MCS
Jranium (ug/L)	<20.0	20.0	pCi/L	E908	6/24/15	6/24/15	MCS
Volatile Organic Comp	ounds						
m,p-Xylene	<5.00	5.00	ug/L	SW846 8260B	6/15/15	6/15/15	HLP
Benzene	<5.00	5.00	ug/L	SW846 8260B	6/15/15	6/15/15	HLP
Kylenes, total	0.00		ug/L	SW846 8260B	6/15/15	6/15/15	HLP
Methyl tert-Butyl Ether	<5.00	5.00	ug/L	SW846 8260B	6/15/15	6/15/15	HLP
Ethylbenzene	<5.00	5.00	ug/L	SW846 8260B	6/15/15	6/15/15	HLP
Foluene	<5.00	5.00	ug/L	SW846 8260B	6/15/15	6/15/15	HLP
o-Xylene	<5.00	5.00	ug/L	SW846 8260B	6/15/15	6/15/15	HLP
Surrogates		% Recovery Recovery Limits	Flag				
1,2-Dichloroethane-d4		111 89-165				/15/15 9:26	
Toluene-d8		81.5 65-124				/15/15 9:26	
4-Bromofluorobenzene		105 94-114			6	/15/15 9:26	

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Zalco Lab #		/ww.zalcolabs	i39 FAX (661) 395-3069 и	d, CA 93308 (661) 395-05	4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069 www.zalcolabs.com	
Page of	50085 -	DY, ID#	CHAIN OF CUSTODY, ID#	TORIES, INC.	ZALCO LABORATORIES, INC.	

NOTE: Samples are discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client's expense.

43.

*Sample Type Key: AQ-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Ground Water; G-Gas; LPG-Liquid Petroleum Gas; OL-Oil; O-Other; P-Petroleum; S-Soil/Solid; ST-Storm Water; WW-Wastewater *Sample No.: FOR OFFICE USE ONLY

ATTACHMENT B

Water Quality Analysis

Wastewater samples collected from the ponds shall be analyzed by a laboratory certified by the Environmental Laboratory Accreditation Program using currently applicable United States Environmental Protection Agency-approved analytical methods for water for the following:

- A. Total dissolved solids;
- B. Metals listed in California Code of Regulations, title 22, section 66261.24. subdivision (a)(2)(A);
- C. Benzene, toluene, ethylbenzene, and xylenes;
- D. Total petroleum hydrocarbons as crude oil;
- E. Polynuclear aromatic hydrocarbons (including acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorine, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, and pyrene);
- F. Radionuclides listed under California Code of Regulations, title 22, Table 64442;
- G. Major and minor cations (including sodium, potassium, magnesium, and calcium);
- H. Major and minor anions (including nitrate, chloride, sulfate, carbonate, bicarbonate, and bromide);
- I. Trace elements (including lithium, strontium, boron, iron, and manganese).

Reporting Requirements

Water Quality information shall be submitted in a technical report that includes at a minimum:

- A. Site plan(s) with the location(s) of where the samples were collected;
- B. A description of how the samples, representative of the pond contents, were collected;
 - Table(s) of analytical results organized by pond number with the data also submitted electronically as an Excel spreadsheet.